"India’s Climate Finance Taxonomy

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India’s Climate Finance Taxonomy: Structuring Sustainable Growth for a Net Zero Future

Introduction

India is one of the fastest-growing economies globally and has made significant strides toward meeting its climate goals. To meet its ambitious climate objectives, particularly the commitment to achieve Net Zero emissions by 2070, India faces the challenge of mobilizing vast amounts of financial resources. In this context, the Union Finance Ministry has unveiled a draft of the **Climate Finance Taxonomy** as a crucial step to guide clean energy investment and climate action. The taxonomy aims to help identify climate-friendly activities, mobilize capital for green projects, and prevent the risk of "greenwashing"—where companies falsely claim environmental benefits without substantiation. This initiative is directly linked to India's Nationally Determined Contributions (NDCs) under the Paris Agreement and the government’s broader development goals.

What is the Climate Finance Taxonomy?

A climate finance taxonomy is a classification system that helps identify and define activities and investments that contribute to climate goals, such as reducing greenhouse gas emissions or enhancing climate resilience. The system categorizes projects and technologies in terms of their environmental sustainability and alignment with national climate targets.

The Need for a Climate Finance Taxonomy

1. **India’s Climate Ambitions**: India’s climate goals are reflected in its **Nationally Determined Contributions (NDCs)** and the announcement of Net Zero emissions by **2070**. These commitments highlight the urgent need for a structured framework to direct resources towards climate-friendly activities.

2. **Financial Requirements**:

    - India requires approximately **USD 2.5 trillion** (at 2014-15 prices) to meet its NDC targets by **2030**.

    - The **India Energy Security Scenarios (IESS) 2047** estimates that India will need around **USD 250 billion** per year until 2047 to transition to cleaner energy sources.

    - Adaptation financing is also critical, with **USD 206 billion** (2014-15 prices) needed for adaptation actions in areas such as agriculture, water resources, and infrastructure until 2030.

3. **Energy Consumption**: India’s per capita energy consumption is significantly lower than that of developed nations, which indicates a **high potential for energy growth** as the country strives to meet its development and energy needs.

    - For instance, India's energy consumption per capita stood at **16.7 gigajoules (GJ)** in **FY23**, while developed nations like the **U.S.** have per capita consumption of **17.2 tCO_2e**.

4. **LIFE (Lifestyle for Environment)**: This movement encourages sustainable, climate-conscious lifestyles, aligning with the broader goals of India’s climate action plans.

Present Status of India’s Climate Action

India’s climate actions have been guided by several critical frameworks, including its NDC and the **National Action Plan on Climate Change (NAPCC)**. The NAPCC comprises **nine national missions** targeting key areas such as:

- Solar energy
- Water management
- Energy efficiency
- Forests and agriculture

India’s Energy Transition Efforts

1. **Diversified Energy Mix**: India is increasingly focusing on renewable energy sources. As of February 2025, non-fossil fuel sources account for **47.4 percent** of India’s total electricity generation capacity, with **solar (21.8 percent)**, **wind (10.3 percent)**, and **hydro (10 percent)** playing key roles.

2. **Solar Initiatives**:

    - **PM KUSUM scheme**: Encourages decentralized solar power installations on agricultural land.

- **PM Surya Ghar Muft Bijli Yojana**: Aims to supply solar power to **one crore households** by **March 2027**.

3. **Energy Efficiency Measures**:

   - **Perform Achieve and Trade (PAT) Scheme** has saved **26 million tonnes of oil equivalent (MTOE)** and reduced over **70 million tonnes of CO2**.

   - **Carbon Credit Trading Scheme (CCTS)**, introduced in 2022, covers nine energy-intensive sectors like aluminum and cement.

4. **Electric Vehicles (EV)**: Initiatives like the **Faster Adoption and Manufacturing of Electric Vehicles (FAME)** and the **PM E-DRIVE Scheme** launched in 2024 aim to increase the adoption of electric vehicles and expand charging infrastructure.

Objectives of the Climate Finance Taxonomy

The primary aim of the climate finance taxonomy is to streamline investments and resources towards climate-friendly technologies and sectors. The specific objectives are:

1. **Facilitating Capital Flow**: The taxonomy will help direct resources towards activities and projects aligned with India's climate action goals, such as **Net Zero emissions by 2070**.

2. **Preventing Greenwashing**: By establishing clear criteria for what constitutes a "green" investment, the taxonomy will minimize the risk of false claims about environmental sustainability.

3. **Alignment with Development Goals**: The taxonomy will ensure that climate actions are consistent with India's developmental objectives, including the **Viksit Bharat** goal by 2047, which aims for sustainable and inclusive growth.

Coverage of the Taxonomy

The taxonomy will cover various technologies, projects, and activities in two broad categories:

1. **Mitigation**:

   - Activities such as **energy efficiency improvements**, **reducing emission intensity**, and expanding **non-fossil fuel energy** sources.

2. **Adaptation**:

    - Projects focused on building resilience through **sustainable water management**, **ecosystem protection**, and **geography-specific adaptation** measures.

3. **Hard-to-Abate Sectors**: The taxonomy will also support transition activities in sectors that are difficult to decarbonize, facilitating the adoption of low-carbon technologies.

Design Features of the Climate Finance Taxonomy

The taxonomy follows a **hybrid approach**, combining **qualitative principles** with **quantitative metrics**. This ensures flexibility and responsiveness to evolving national and international climate goals while providing measurable targets for transparency.

1. **Qualitative Principles**: These include high-level objectives guiding what constitutes a climate-relevant project, aligned with India's NDCs and Sustainable Development Goals (SDGs).

2. **Quantitative Metrics**: Performance thresholds, such as expected **GHG savings** and **emission intensity improvements**, will help ensure accountability and transparency.

3. **Living Document**: The taxonomy will be updated periodically to accommodate new developments, technologies, and policy shifts, ensuring it remains relevant and effective.

4. **Phased Implementation**: The taxonomy will initially be based on qualitative criteria, with quantitative thresholds added over time for greater precision in targeting climate-related investments.

Principles of the Climate Finance Taxonomy

The Indian Climate Finance Taxonomy is based on eight core principles, which guide the identification and delineation of climate-relevant activities and projects:

1. **Consistency with Climate Action Goals**: Activities must align with the **NDCs**, **Net Zero 2070** goal, and **Viksit Bharat** vision.

2. **No Significant Harm**: Projects must ensure that addressing one environmental issue does not harm other climate objectives.

3. **Country-Specific Pathways**: The taxonomy recognizes that immediate compliance with stringent standards may not be feasible across all sectors, especially during early stages of transition.

4. **Interoperability**: The taxonomy should align with international frameworks, providing flexibility based on India's specific development and climate needs.

5. **Supporting Transitions**: It aims to support sectors critical for the transition to low-carbon economies, facilitating investment in hard-to-abate sectors.

6. **Indigenous Technologies**: Preference will be given to projects that promote **indigenous technologies** and R&D to encourage local innovation.

7. **Science-Based and Transparent**: The taxonomy will rely on objective, scientifically supported metrics to ensure transparency in defining climate-related investments.

8. **Support for MSMEs**: Special provisions will ensure that **Micro, Small, and Medium Enterprises (MSMEs)** are not left out of the climate finance ecosystem.

Conclusion

India's **Climate Finance Taxonomy** is a vital tool for streamlining the country's transition to a sustainable, low-carbon economy. By facilitating investments in climate-friendly activities, ensuring transparency, and preventing greenwashing, it aims to mobilize the necessary financial resources for achieving India's ambitious climate goals. With its clear framework and principles, the taxonomy promises to play a critical role in aligning the country's climate and developmental objectives, ensuring that investments contribute to both environmental sustainability and economic growth. As India moves towards **Net Zero emissions by 2070**, the taxonomy will be instrumental in guiding its path to a greener and more sustainable future.